

CMA and the Medical Schools

THESE ARE TIMES OF GREAT and fundamental changes in medical education and medical practice. Many of the old assumptions and beliefs are being questioned. New assumptions, attitudes and expectations are making new demands upon both medical education and medical practice. Neither "town" nor "gown" is yet entirely clear just how these demands are best to be met. Precise documentation of what is needed is absent. A realization is growing that a substantial number of these unsolved problems are shared alike by medical schools and by organized medicine.

This community of interest is brought into focus by a recent action of the California Medical Association Commission on Legislation. The Commission has invited suggestions and expressions of attitude from the medical school deans for consideration in preparing CMA's 1971 legislative program, both with respect to the needs of the medical schools and the posture CMA should take on statewide issues. As far as we know, this action is unprecedented. It could lead to a new cooperation and a better informed approach to many health problems. This should serve the government and the people of this state very well indeed.

Liaison between CMA and the eight medical schools in this state is nothing new. Many members of this association may not be fully aware of the extent to which this has been developed over the last decade or so. We know of nothing comparable to it anywhere in the nation. Many years ago a Liaison Committee to Medical Schools was created for the purpose of resolving the then more frequent problems of potential or actual misunderstanding between "town" and "gown." This committee continues to function and serve its purpose. But the liaison has gone far beyond this. Deans, faculty and students have all become increasingly involved in CMA activities.

The deans are regularly invited to the Council's meetings and to speak. They are provided with agenda and minutes. They are warmly welcomed and usually a number are present. Two deans have been particularly active in association affairs, and a coterie of assistant and associate deans contribute substantially. This liaison proved particularly important when the deans, the CMA, the California Hospital Association, the Department of Public Health and others got together, and through their collaborative efforts made California's Regional Medical Programs one of the most outstanding in the nation.

Faculty members from the medical schools have served on various CMA committees over the years and some have served in the House of Delegates. Many more have participated in CMA institutes and postgraduate courses for the continuing education of physicians throughout the state. With the more recent advent of the Scientific Board and its various scientific committees this faculty contribution to the scientific purpose of CMA increased and achieved its present very significant level when the Advisory Panels to the eighteen Scientific Sections of the Scientific Assembly came into being. One is just beginning to see what can and is being accomplished as the resources of the medical school faculties are more closely brought to bear upon the scientific activities of the CMA. Each Advisory Panel includes a member from the appropriate department of each of the eight medical schools as well as representatives from the Scientific Sections and from the various scientific specialty societies recognized by the Council. Among the results already visible are innovative and improved programs at the CMA Scientific Sessions, and the timely epitomes of important advances in clinical medicine in each specialty which have now become a regular feature in CALIFORNIA MEDICINE.

Liaison at the student level has also existed for many years. More recently the Committee on the

Role of Medicine in Society has played a central role. The student body in each of the eight California medical schools designates a representative who serves on this committee. He acts as the primary liaison between the CMA and the students in his school. These students attend the AMA House of Delegates meetings and have been welcomed there by the California delegation. They have spoken their thoughts in AMA reference committees and in the delegation caucuses. Plans are afoot for similar student representative participation at the CMA Annual Meeting in March. In addition, twenty or more other CMA committees have invited student participation and have welcomed students who, incidentally, were selected by the students themselves from applicants who were interested in the subject matter. And not to be overlooked is the "Bridge the Generation Gap" program of CALIFORNIA MEDICINE which, with substantial help from the Woman's Auxiliary, is at present providing 860 subscriptions to this journal to medical students.

Now that many problems will be shared, the liaison traffic between town and gown should be equal both ways. Organized medicine at its higher levels should be as willing to participate where needed in medical school affairs as the deans are to help in advancing programs of the medical association. And at grass-roots a balancing of somewhat reverse order is needed; more full-time faculty members should join in the work-a-day chores of local medical societies, through membership and active participation, just as unpaid "town" physicians give their time and services to teach medical students and help supervise the care of medical center patients. As the ivory towers and their scholarly inhabitants find themselves increasingly awash in the problem-ridden mainstream of medical care, it is essential that they become much more involved in what it to be done about these problems. It is not too soon for this involvement to start. The course of the stream, even its content, is undergoing fundamental change. It can still be directed. The invitation of the CMA Legislative Commission is already being heeded by the medical schools and others. It could be the beginning of a great new cooperative effort in the professional and public interest.

Adam and Eve

ACCORDING TO THE BIBLE, Eve was a chondral extension of Adam; at least since that time, man has wondered about the differences between the sexes, and innumerable ones, currently very unfashionable to assert, have been recognized. From the endocrine viewpoint, the primary male-female difference is in the amount and ratio of androgens and estrogens produced. Since androgen is an obligatory intermediate for estrogen biosynthesis, and since both ovary and testis make the same hormones, the essential sexual differences are regulatory ones—(1) how much androgen to make and (2) whether to leave it primarily as such or to convert it to estrogen.

Gonadal differentiation in the embryo is determined by the nature of the second sex chromosome; if this is a Y, a testis develops, and if it is an X, an ovary.¹ A locally active testis substance called the "inducer" then acts to suppress the development of the female duct primordia which would otherwise give rise to the uterus and Fallopian tubes. From that point forth, all of differentiation depends not on genetic sex but on the presence or absence of potent androgens. The Wolffian ducts develop into the vasa, seminal vesicles, and epididymes, and the external genitalia masculinize because of androgen hegemony. That is, the genital structures are not genetically male or female, but assume male patterns because of a positive influence of the male hormones derived from the testis.

A similar role of androgen has been shown in establishing the difference between the male and female brain in their stimulation of production of gonadotropin. Specifically, males produce gonadotropin in an acyclic manner, whereas normal females release gonadotropin in a cyclic manner which results in estrus or menstrual cycles. This difference is not in the pituitary itself, since a male pituitary transplanted under a female hypothalamus will secrete gonadotropin cyclically and can support normal ovarian function. The programming of this behavior lies in the pattern of hypo-